

## WHAT IS CLAIMED IS:

1. An absorbent article comprising a body contacting surface and an absorbent core, wherein
  - (1) at least a portion of the body contacting surface comprises an effective amount of a skin care composition which is solid or semisolid at 40°C and which is transferable from the body contacting surface to the wearer's skin by contact, normal wearer motion and body heat at a level effective in providing a skin benefit to the wearer's skin, and
  - (2) the skin care composition has viscosity of more than about  $10^5$  Poise under shear stress of less than about  $3 \times 10^4$  dynes/cm<sup>2</sup>, and viscosity of less than about  $10^2$  Poise under shear stress of more than about  $10^6$  dynes/cm<sup>2</sup>, at 40°C.
2. The absorbent article of Claim 1 wherein the skin care composition has viscosity of more than about  $10^6$  Poise under shear stress of less than about  $3 \times 10^4$  dynes/cm<sup>2</sup> at 40°C.
3. The absorbent article of Claim 2 wherein the skin care composition has viscosity of less than about  $10^1$  Poise under shear stress of more than about  $10^6$  dynes/cm<sup>2</sup> at 40°C.
4. The absorbent article of Claim 3 wherein the skin care composition has consistency of not more than about 300 at 40°C.
5. The absorbent article of Claim 4 wherein the skin care composition has consistency of not more than about 150 at 40°C.
6. The absorbent article of Claim 5 wherein the skin care composition has consistency of not more than about 100 at 40°C.
7. The absorbent article of Claim 6 wherein the skin care composition comprises from about 40 to about 90 % of an emollient and from about 10 to about 60 % of an agent immobilizing the emollient.
8. The absorbent article of Claim 7 wherein the emollient is selected from the group consisting of petroleum-based, fatty acid ester type, alkyl ethoxylate type, fatty acid ester ethoxylates, fatty alcohol type, polysiloxane type, and mixtures of them.

9. The absorbent article of Claim 8 wherein the emollient is petrolatum.
10. The absorbent article of Claim 9 wherein petrolatum comprises a heavy aliphatic hydrocarbons and a light aliphatic hydrocarbons, wherein petrolatum contains the heavy aliphatic hydrocarbons more than the light aliphatic hydrocarbons.
11. The absorbent article of Claim 10 wherein the heavy aliphatic hydrocarbons have alkyl chain length of from 33-36 and light aliphatic hydrocarbons have alkyl chain length of from 23-26, wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 2.0 : 1.0 and 1.0 : 1.0.
12. The absorbent article of Claim 11 wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 1.5 : 1.0 and 1.0 : 1.0.
13. The absorbent article of Claim 10 wherein the heavy aliphatic hydrocarbons have alkyl chain length of from 30-36 and light aliphatic hydrocarbons have alkyl chain length of from 20-26, wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 2.5 : 1.0 and 1.0 : 1.0.
14. The absorbent article of Claim 13 wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 2.0 : 1.0 and 1.0 : 1.0.
15. The absorbent article of Claim 10 wherein the heavy aliphatic hydrocarbons have alkyl chain length of from 27-36 and light aliphatic hydrocarbons have alkyl chain length of from 17-26, wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 3.5 : 1.0 and 1.5 : 1.0.
16. The absorbent article of Claim 15 wherein the ratio of the heavy aliphatic hydrocarbons to the light aliphatic hydrocarbons is between 3.0 : 1.0 and 2.0 : 1.0.
17. The absorbent article of Claim 7 wherein the immobilizing agent is soluble in the emollient.
18. The absorbent article of Claim 17 wherein the immobilizing agent is selected from the group consisting of C<sub>14</sub>-C<sub>24</sub> fatty alcohols, C<sub>12</sub>-C<sub>24</sub> fatty acids, and C<sub>12</sub>-C<sub>24</sub> fatty alcohol ethoxylates, waxes, and mixtures thereof.
19. The absorbent article of Claim 18 wherein the immobilizing agent is C<sub>14</sub>-C<sub>24</sub> fatty alcohol.

10009083-032002

20. The absorbent article of Claim 19 wherein the immobilizing agent is C<sub>18</sub>-C<sub>24</sub> fatty alcohol.
21. The absorbent article of Claim 20 wherein the immobilizing agent is behenyl alcohol.
22. The absorbent article of Claim 21 wherein behenyl alcohol comprises from about 50 % to about 99.99 % of C<sub>22</sub> fatty alcohol, from 0 % to about 27 % of C<sub>20</sub> fatty alcohol, from 0 % to about 20 % of C<sub>18</sub> fatty alcohol, and from about 0.01 % to about 3 % of C<sub>24</sub> fatty alcohol.
23. The absorbent article of Claim 22 wherein behenyl alcohol comprises from about 63 % to about 84.9 % of C<sub>22</sub> fatty alcohol, from about 10 % to about 20 % of C<sub>20</sub> fatty alcohol, from about 5 % to about 15 % of C<sub>18</sub> fatty alcohol, and from about 0.1 % to about 2 % of C<sub>24</sub> fatty alcohol.
24. The absorbent article of Claim 7 wherein the immobilizing agent is insoluble in the emollient.
25. The absorbent article of Claim 24 wherein the immobilizing agent is a particulate thickener selected from the group consisting of silica, treated silica, fumed silica, polymethacrylate polymers, polymethacrylate and styrene copolymers, calicum silicate, treated calcium silicate, treated bentonite, treated hectorite, and mixtures thereof.
26. The absorbent article of Claim 25 wherein the immobilizing agent is selected from fumed silica, treated bentonite, treated hectorite, and mixtures thereof.
27. The absorbent article of Claim 26 wherein the particulate thickener has an average diameter of less than about 100 microns.
28. The absorbent article of Claim 27 wherein the particulate thickener has an average diameter of less than about 20 microns.
29. The absorbent article of Claim 28 wherein the particulate thickener has an average diameter of less than about 10 microns.
30. An absorbent article comprising a body contacting surface and an absorbent core, wherein

- 5 (1) at least a portion of the body contacting surface comprises an effective amount of a skin care composition which is solid or semisolid at 40°C and which is transferable from the body contacting surface to the wearer's skin by contact, normal wearer motion and body heat at a level effective in providing a skin benefit to the wearer's skin,
- (2) the skin care composition comprises a skin care active ingredient, and
- 10 (3) the skin care composition has viscosity of more than about  $10^5$  Poise under shear stress of less than about  $3 \times 10^4$  dynes/cm<sup>2</sup>, and viscosity of less than about  $10^2$  Poise under shear stress of more than about  $10^6$  dynes/cm<sup>2</sup>, at 40°C.
31. The absorbent article of Claim 30 wherein the skin care active ingredient is selected from the group consisting of skin care agents, proton donating agents, enzyme inhibitors, and mixtures thereof.
32. The absorbent article of Claim 31 wherein the skin care active ingredient is the skin care agent.
33. The absorbent article of Claim 32 wherein the skin care composition comprises from about 0.001 % to about 50 % of the skin care agent.
- 5 34. The absorbent article of Claim 33 wherein the skin care agent is selected from the group consisting of allantoin, aluminum hydroxide gel, calamine, cocoa butter, dimethicone, cod liver oil, glycerine, kaolin, petrolatum, lanolin, mineral oil, shark liver oil, white petrolatum, talc, topical starch, zinc acetate, zinc carbonate, zinc oxide, live yeast cell derivatives, aldioxa, aluminum acetate, microporous cellulose, cholecalciferol, colloidal oatmeal, cysteine hydrochloride, dexpanthenol, Peruvian balsam oil, protein hydrolysates, racemic methionine, sodium bicarbonate, Vitamin A, buffered mixture of cation and anion exchange resins, corn starch, trolamine, bismuth subnitrate, boric acid, ferric chloride, polyvinyl pyrrolidone - vinyl acetate copolymers, sulfur, tannic acid, and mixtures thereof.
- 10 35. The absorbent article of Claim 30 wherein the skin care active ingredient is insoluble, wherein the insoluble skin care active ingredient is dispersed in skin care composition with a dispersing agent.
- 5 36. The absorbent article of Claim 35 wherein the dispersing agent is selected from the group consisting of diethanolamine polyoxyethylene oleyl ether phosphate,

10009033-032002

polyhydroxystearic acid, polyglyceryl - 6 polyricinoleate, neopentyl glycol diisostearate, propylene glycol dicaprates, isoelcosane and polyisobutene and quaternium 18, phenyltrimethicone and quaternium - 18 hectorite and triethyl citrate, isohexadecane and quaternium - 18 hectorite and propylene carbonate, octyldodecanol and quaternium - 18 hectorite and propylene carbonate, mineral oil and quaternium - 18 hectorite and propylene carbonate, isopropyl myristate and stearylalkonium hectorite and propylene carbonate, cyclomethicone and quaternium - 18 and SDA 40, lanolin oil and isopropyl palmitate and stearylalkonium hectorite and propylene carbonate and propyl paraben, 1 - eicosanol, and mixtures thereof.

5

10

20020303 10009083-032002